

# PUMP Brief

Hydraulic Pump Division

AS-0021

## Gold Cup Solution Series: Part 7

Gold Cup Pump Circuit Drawings

In response to many requests, this Brief provides most of the Gold Cup Series Pump circuit drawings in use today along with the port size information. In PDF format, we have provided links to the model designation. Printing this file front and back and placing it in a binder makes a great reference tool and will conveniently place the port size charts next to the corresponding circuit drawing.

P6/7/8L	P11/14L	P24/30L
P6/7/8P	P11/14P	P24/30P
P6/7/8R	P11/14R	P24/30R
P6/7/8S	P11/14S	P24/30S
P6/7/8V	P11/14V	
P6/7/8X	P11/14X	

### Need CAD versions?

In addition to links within the PDF, all circuit drawing files (in AutoCAD format) have been loaded on PHpump.com and can be quickly accessed and downloaded by clicking on the "AutoCAD Gold Cup Circuits" button below. The CAD versions will provide an accurate base drawing of the specified configuration, while also giving the designer freedom to make changes as needed for the application.

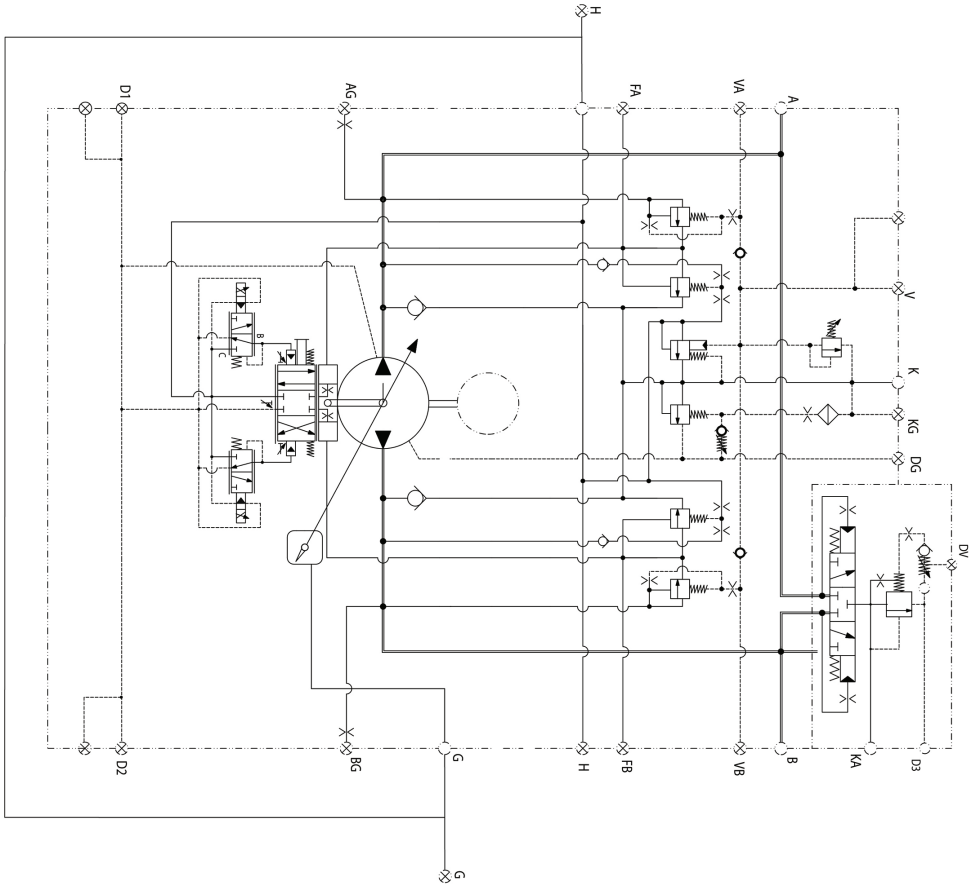
**Support:** Have a question on Gold Cup pump circuits or circuit drawings? Call the Technical Support Team at 937.644.3915 or contact [pumptechsupport@parker.com](mailto:pumptechsupport@parker.com) for assistance.

**AUTOCAD GOLD  
CUP CIRCUITS**

# P6/7/8L

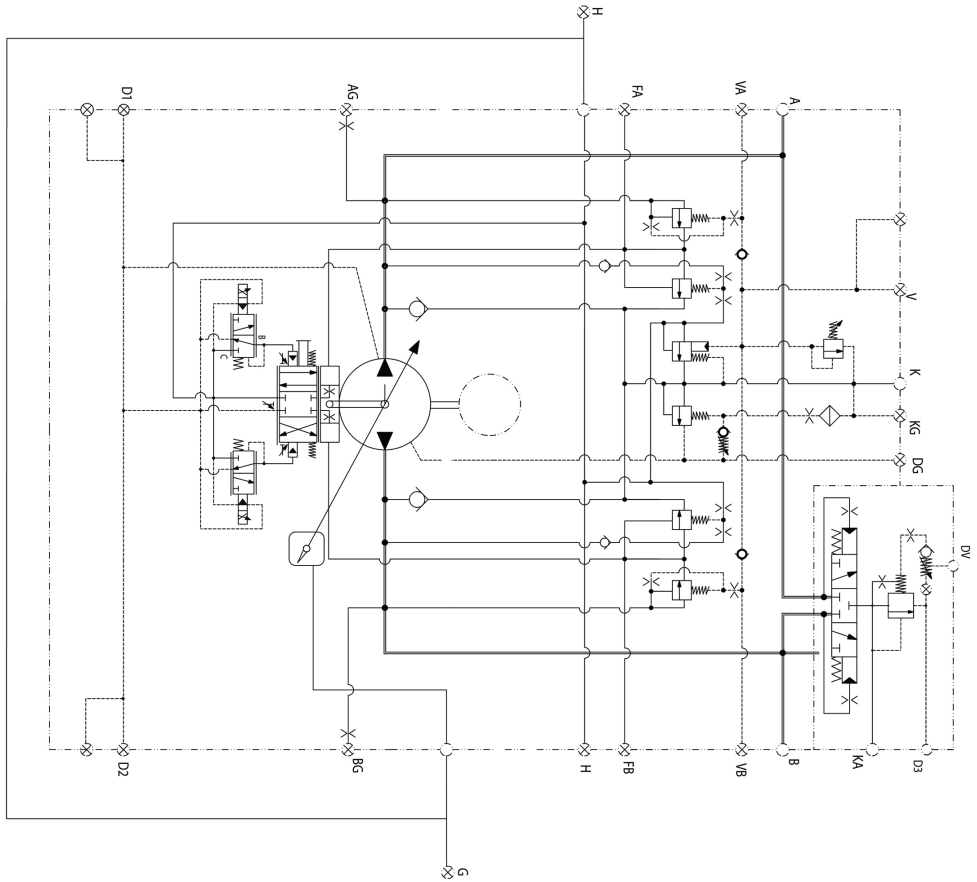
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 12 STR. THD	Case Drains
G	SAE 8 STR. THD	Servo Outlet to External Filter or Gauge Connection
H	SAE 8 STR. THD	Servo Pressure Inlet From External Filter
K	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V,VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
KA	SAE 12 STR. THD	Shuttle Relief Inlet
D3	SAE 16 STR. THD	Shuttle Drain
DV	SAE 4 STR. THD	Shuttle External Pilot Valve Drain

Shown with internal drain Shuttle Valve Part # S23-12007-0 (row #08003010003)



P6/7/8L

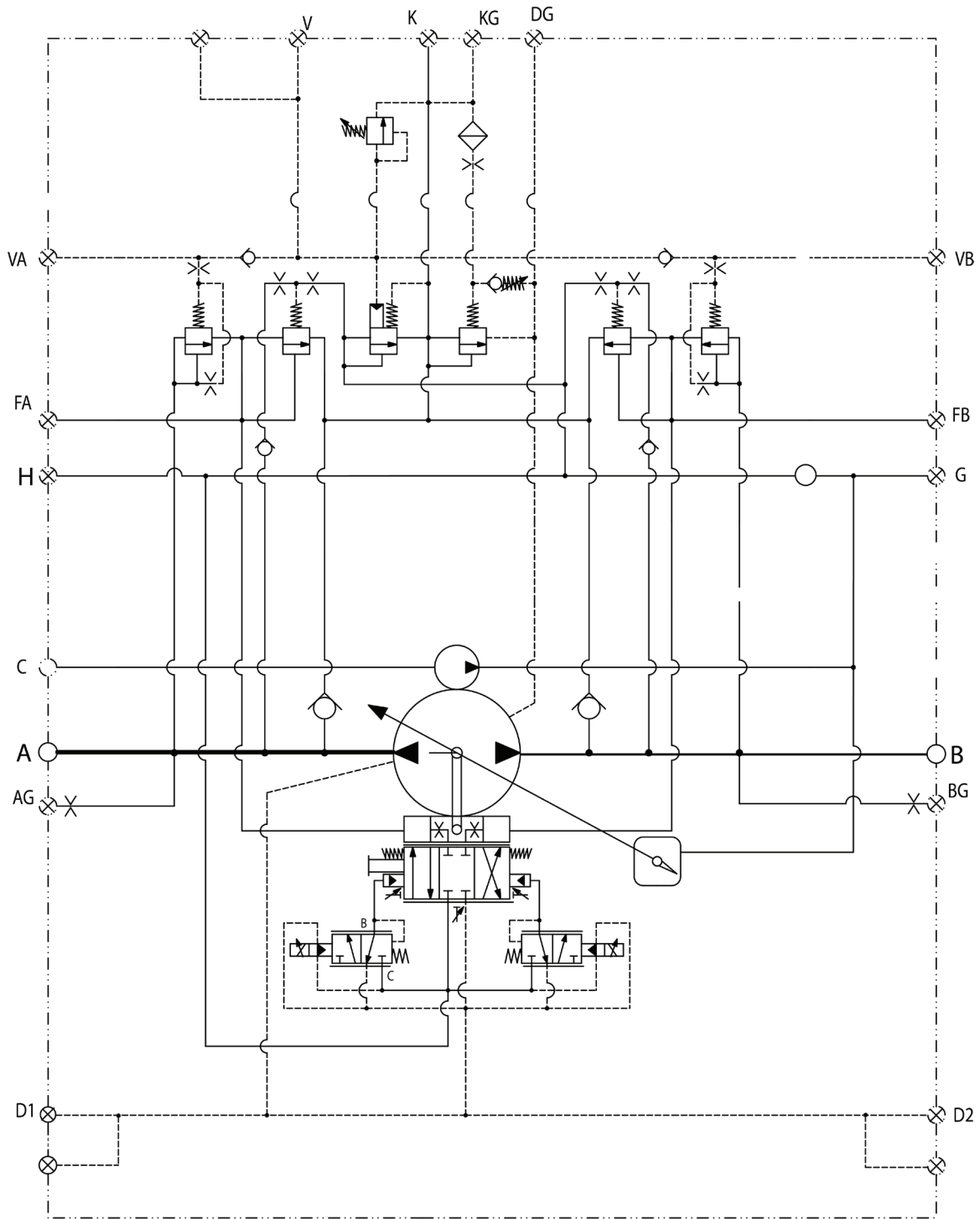
Shown with internal drain Shuttle Valve Part # S23-11966-0 (row #08003010001)



P6/7/8L

# P6/7/8P

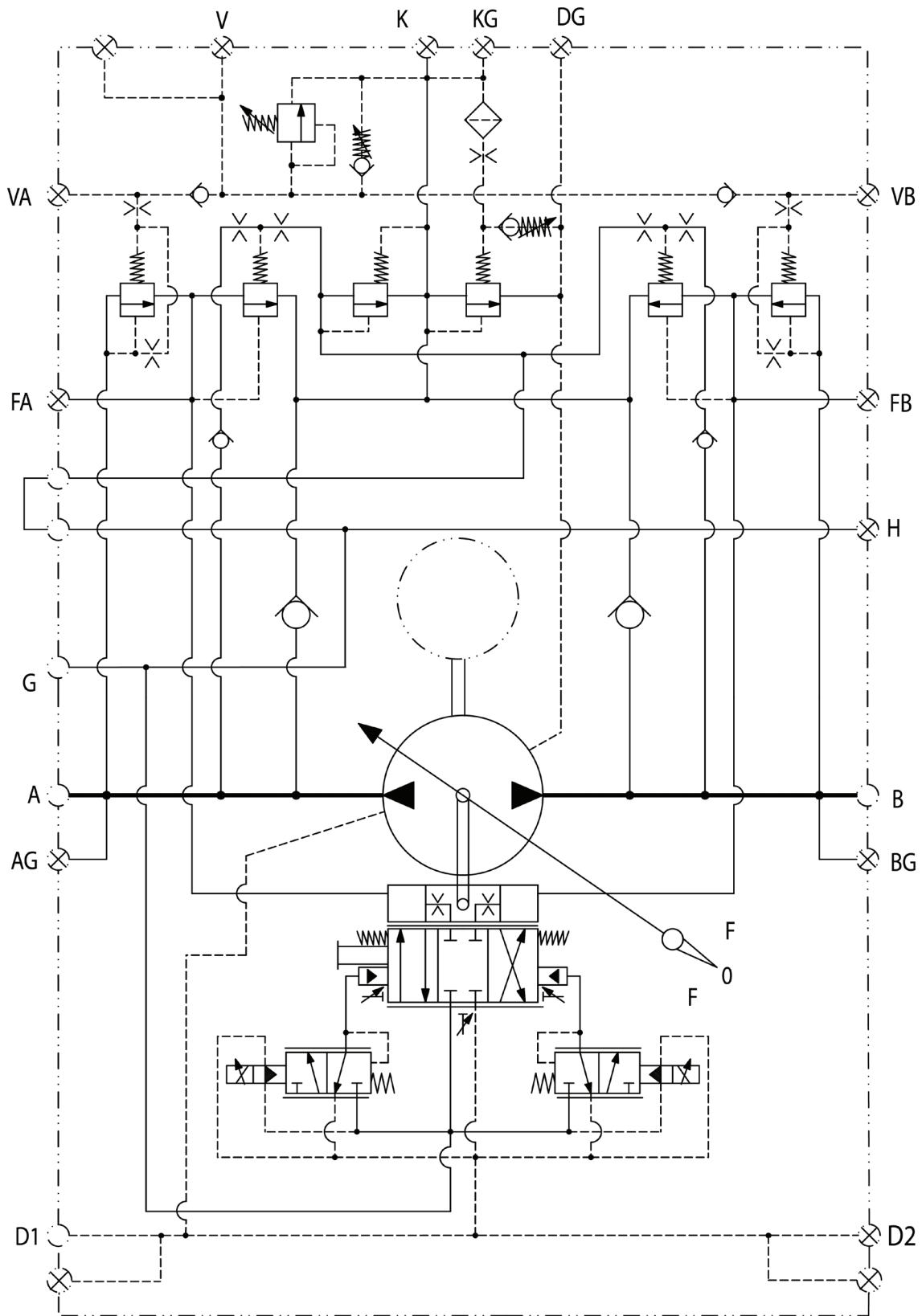
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 12 STR. THD	Case Drains
G	SAE 8 STR. THD	Servo Outlet to External Filter or Gauge Connection
H	SAE 8 STR. THD	Servo Pressure Inlet From External Filter
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side



# P6/7/8P

# P6/7/8R

Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 12 STR. THD	Case Drains
G	SAE 8 STR. THD	Servo Outlet to External Filter or Gauge Connection
H	SAE 4 STR. THD	Servo Pressure Inlet From External Filter
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side

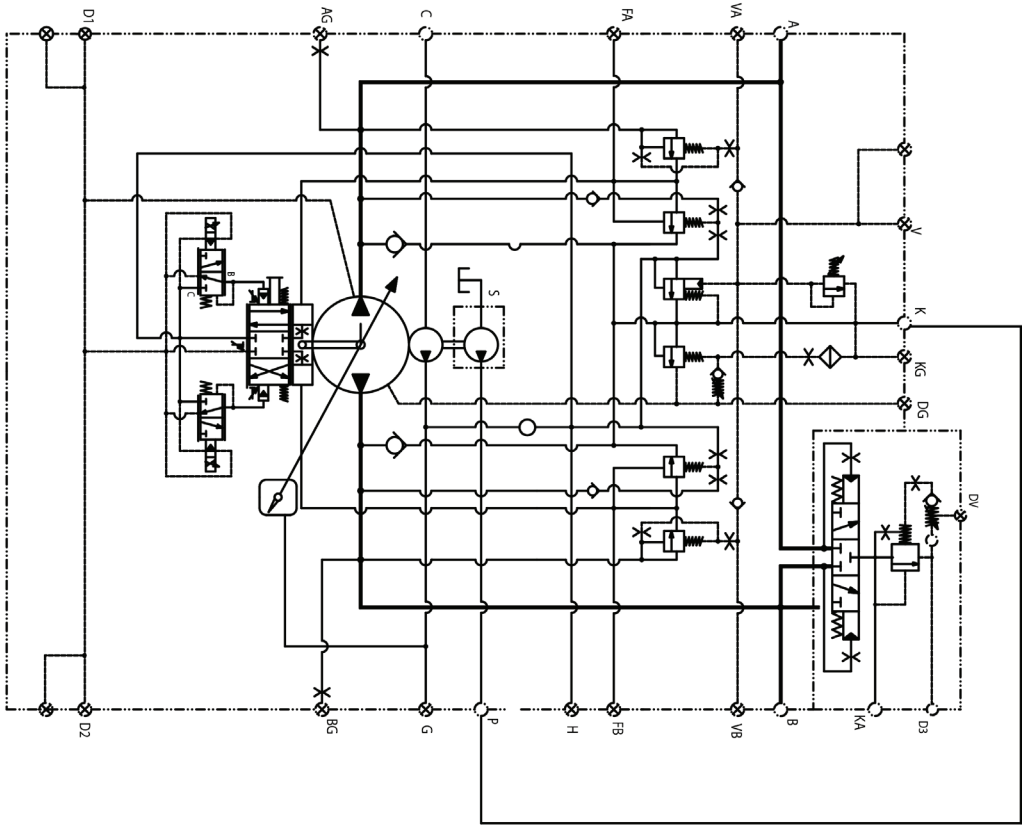


# P6/7/8R

# P6/7/8S

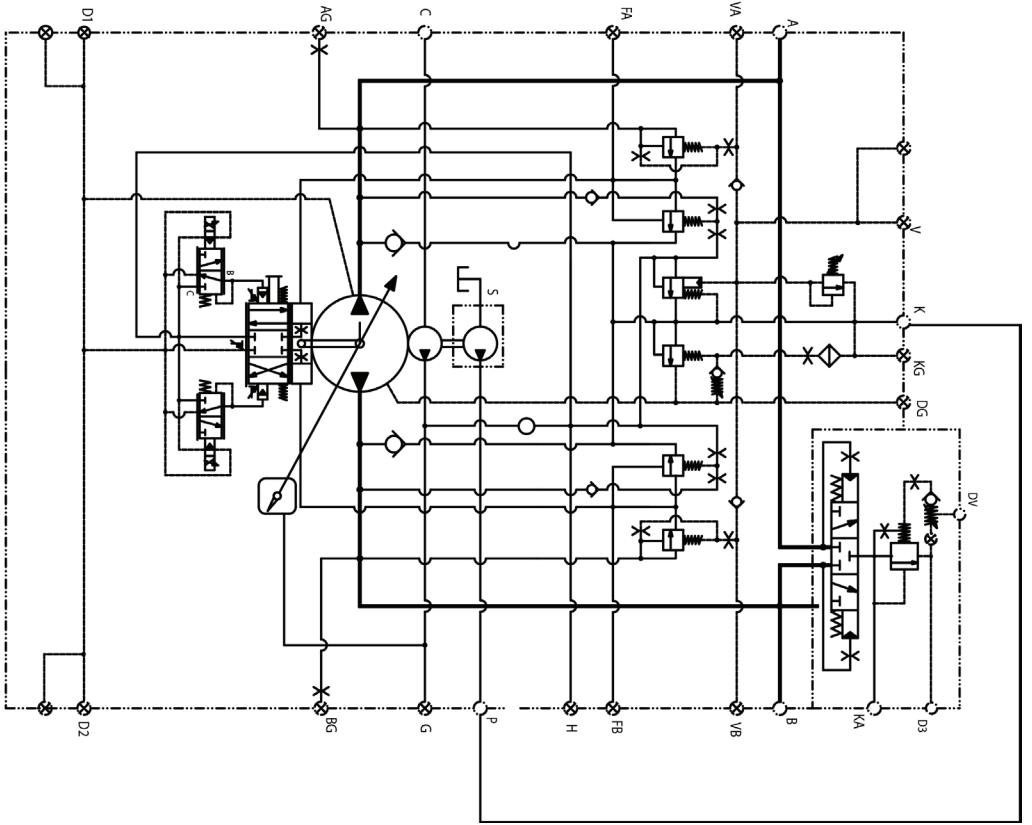
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 12 STR. THD	Case Drains
G	SAE 8 STR. THD	Servo Outlet to External Filter or Gauge Connection
H	SAE 8 STR. THD	Servo Pressure Inlet From External Filter
K	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
KA	SAE 12 STR. THD	Shuttle Relief Inlet
D3	SAE 16 STR. THD	Shuttle Drain
DV	SAE 4 STR. THD	Shuttle External Pilot Valve Drain

Shown with internal drain Shuttle Valve Part # S23-12007-0 (row #080030100003)



P6/7/8S

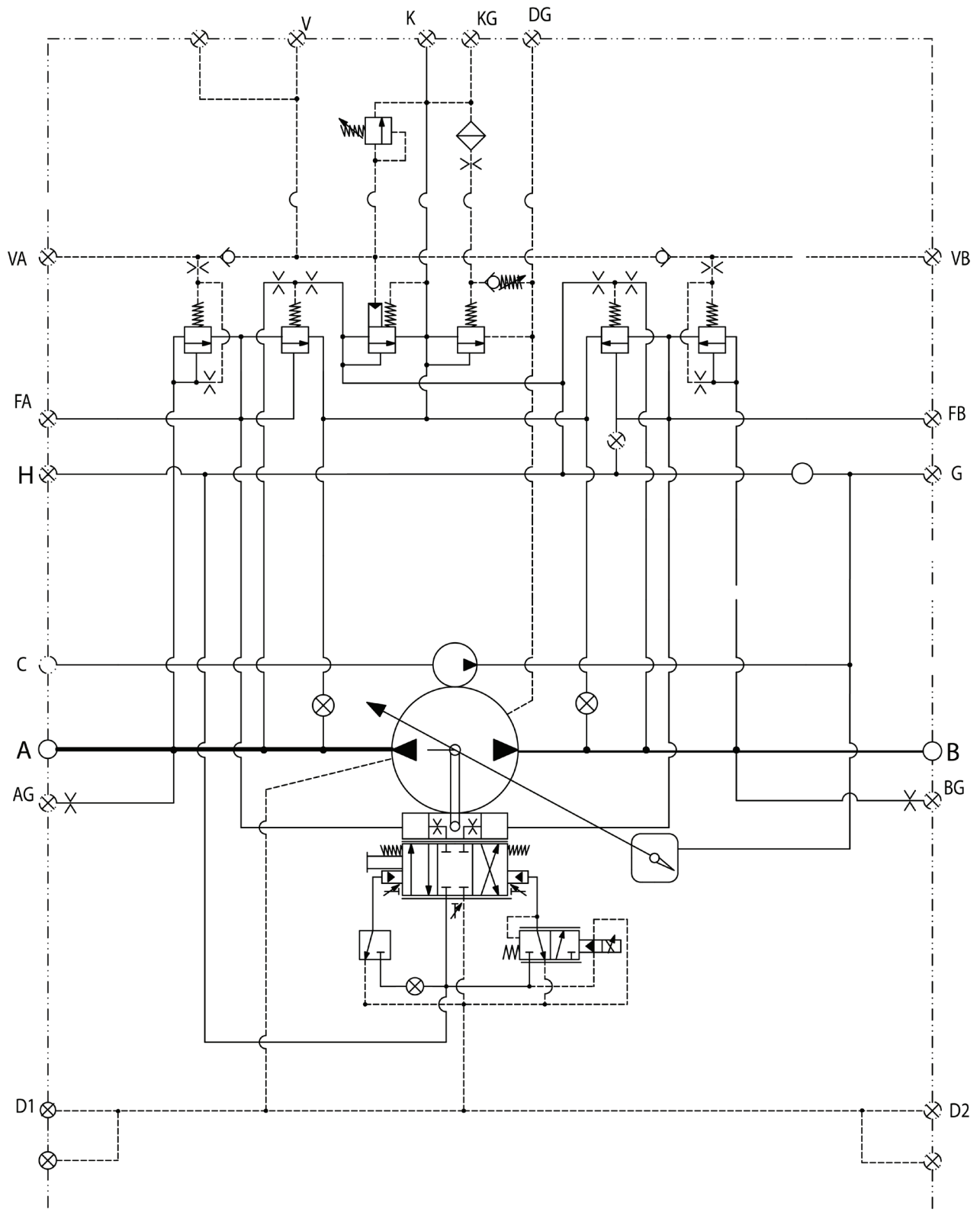
Shown with external drain Shuttle Valve Part # S23-11966-0 (row #0800301100001)



P6/7/8S

# P6/7/8V

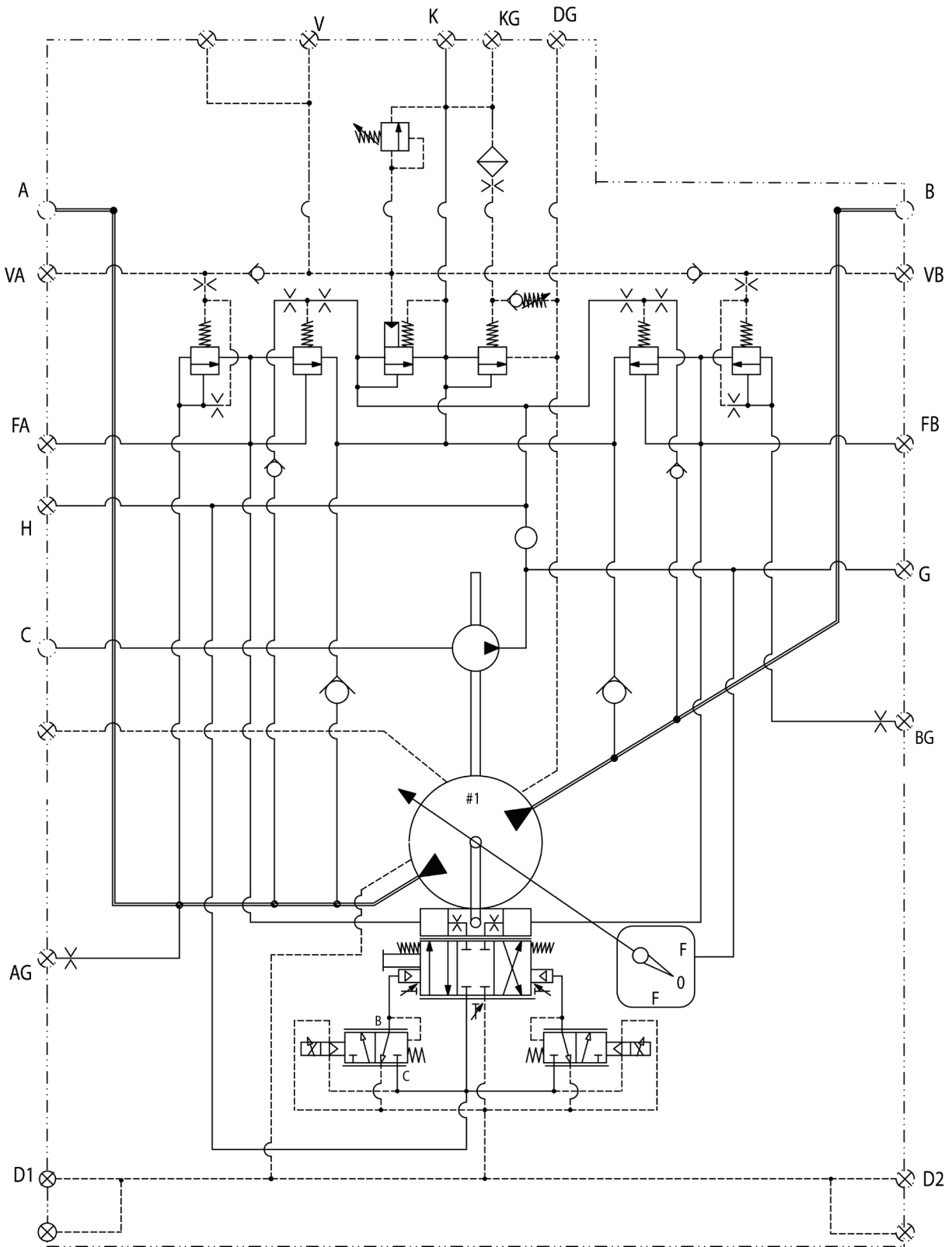
Ports	Port Sizing	Identification Key
A	SAE 2.0 Code 61	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 12 STR. THD	Case Drains
G	SAE 8 STR. THD	Servo Outlet to External Filter or Gauge Connection
H	SAE 8 STR. THD	Servo Pressure Inlet From External Filter
K	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side



# P6/7/8V

# P6/7/8X

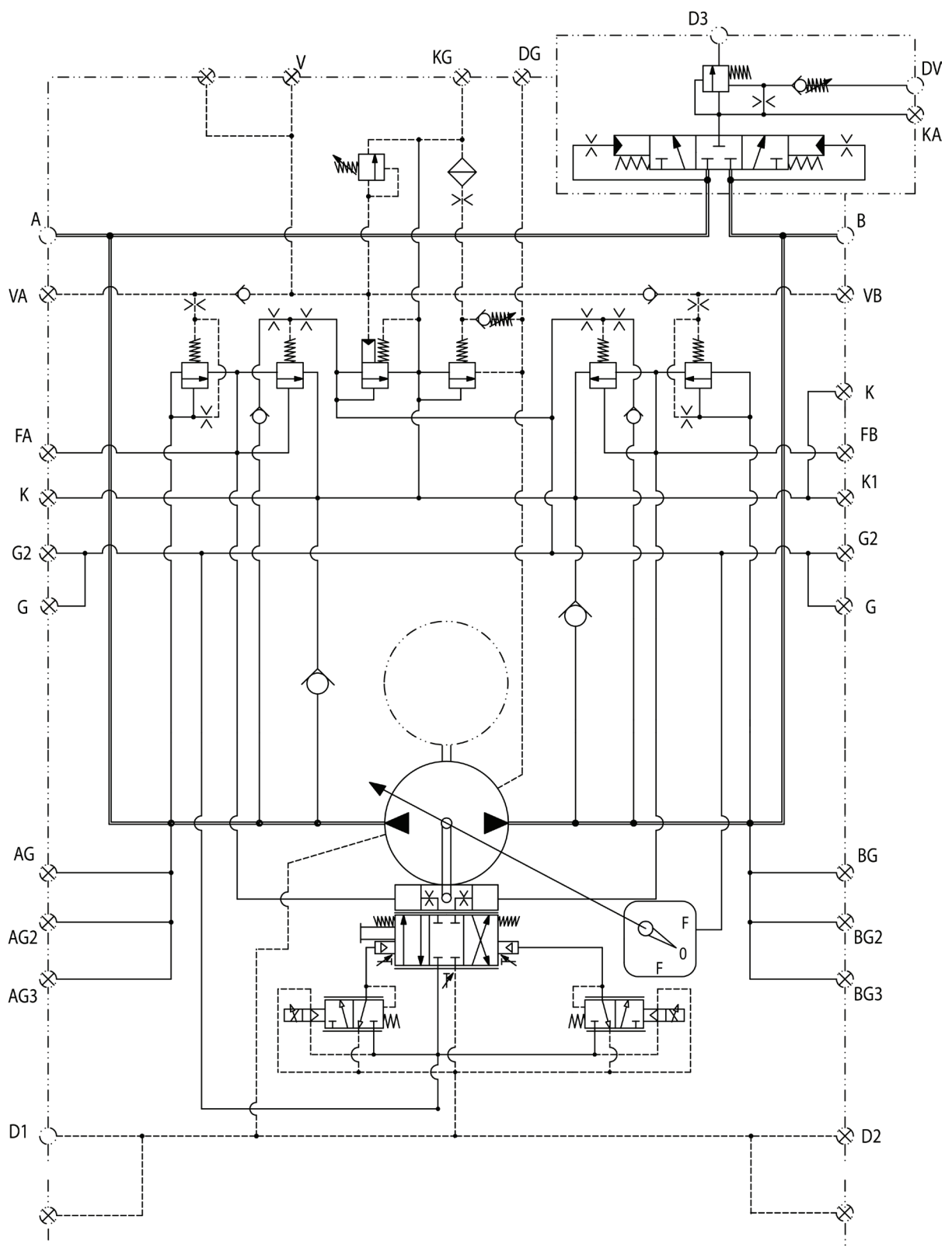
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 12 STR. THD	Case Drains
G	SAE 8 STR. THD	Servo Outlet to External Filter or Gauge Connection
H	SAE 8 STR. THD	Servo Pressure Inlet From External Filter
K	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side



# P6/7/8X

# P11/14L

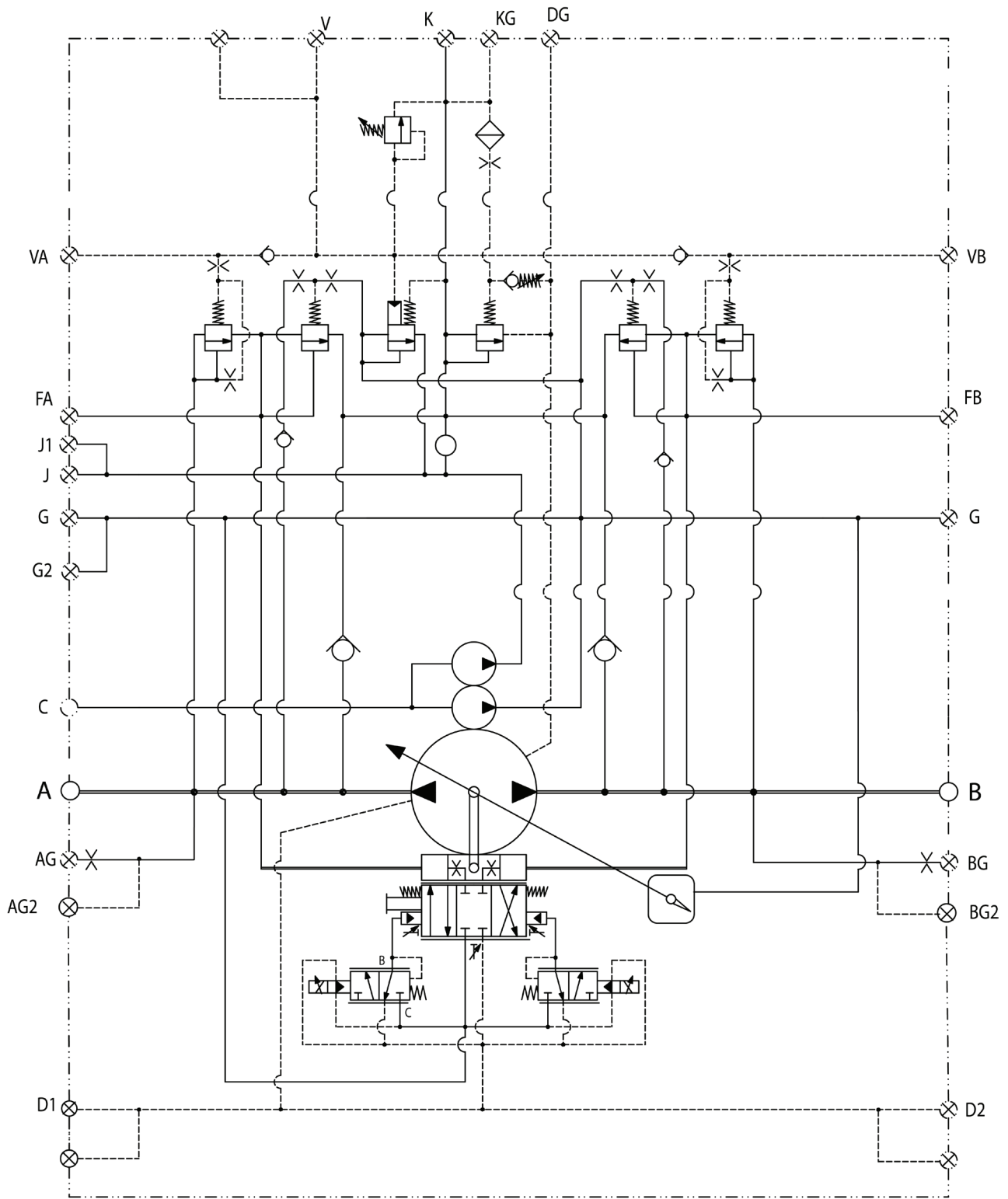
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG & AG3	SAE 6 STR. THD	System "A" Gauge Connection
BG & BG3	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 4 STR. THD	System "A" & "B" Gauge Connections
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 16 STR. THD	Case Drains
G	SAE 4 STR. THD	Servo Outlet to External Filter or Gauge Connection
K & K1	SAE 12 STR. THD	Auxiliary Replenish Inlets from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
KA	SAE 12 STR. THD	Shuttle Relief Inlet
D3	SAE 16 STR. THD	Shuttle Drain
DV	SAE 4 STR. THD	Shuttle External Pilot Valve Drain
G2	SAE 8 STR. THD	Servo Pressure Gauge Connection



# P11/14L

# P11/14P

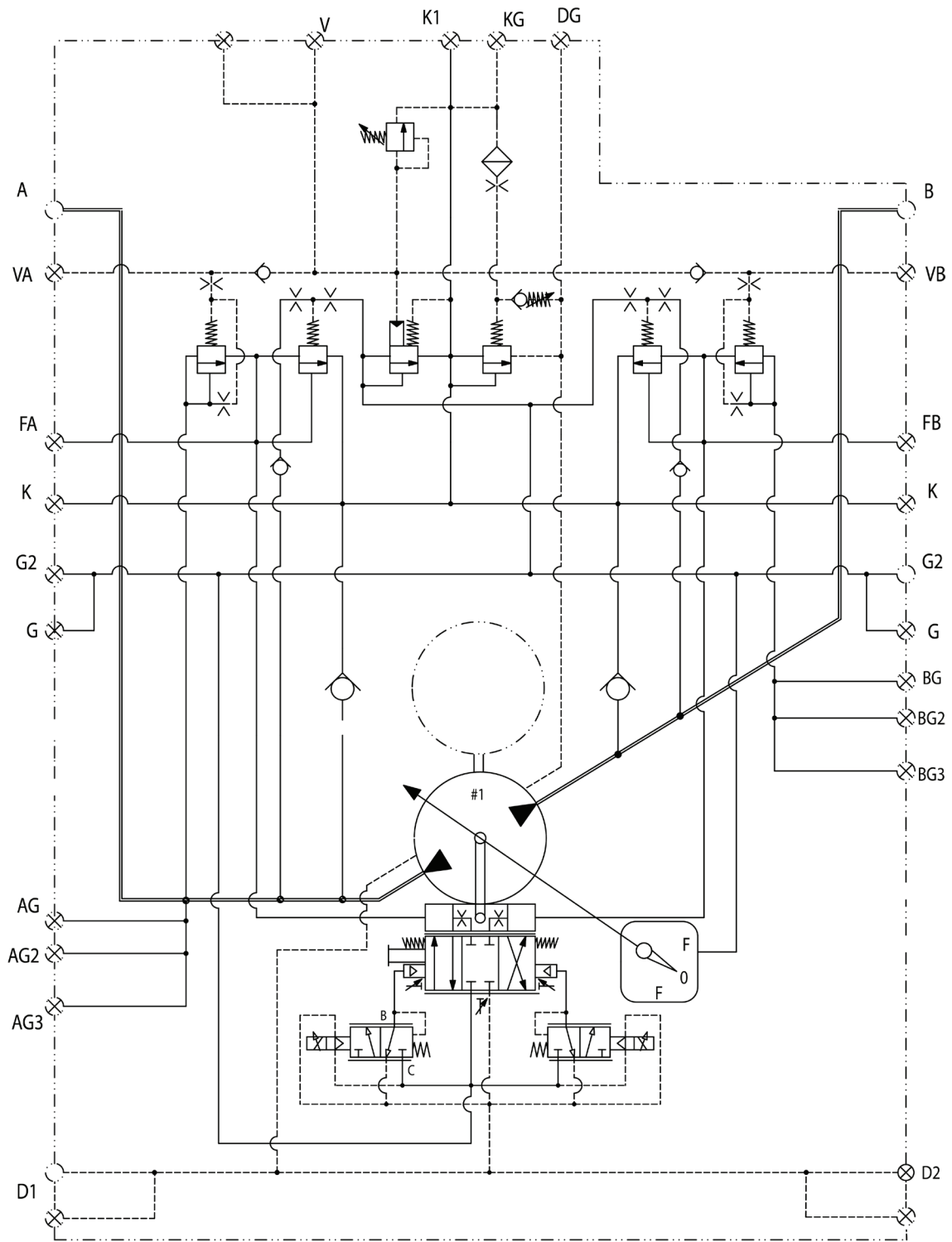
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 4 STR. THD	System "A" & "B" Gauge Connections
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 16 STR. THD	Case Drains
G	SAE 4 STR. THD	Servo Outlet to External Filter or Gauge Connection
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
J	SAE 10 STR. THD	Internal Auxiliary Pump Outlet To External Filter
G2	SAE 8 STR. THD	Servo Pressure Gauge Connection
J1	SAE 8 STR. THD	Internal Auxiliary Pump Outlet To External Filter



# P11/14P

# P11/14R

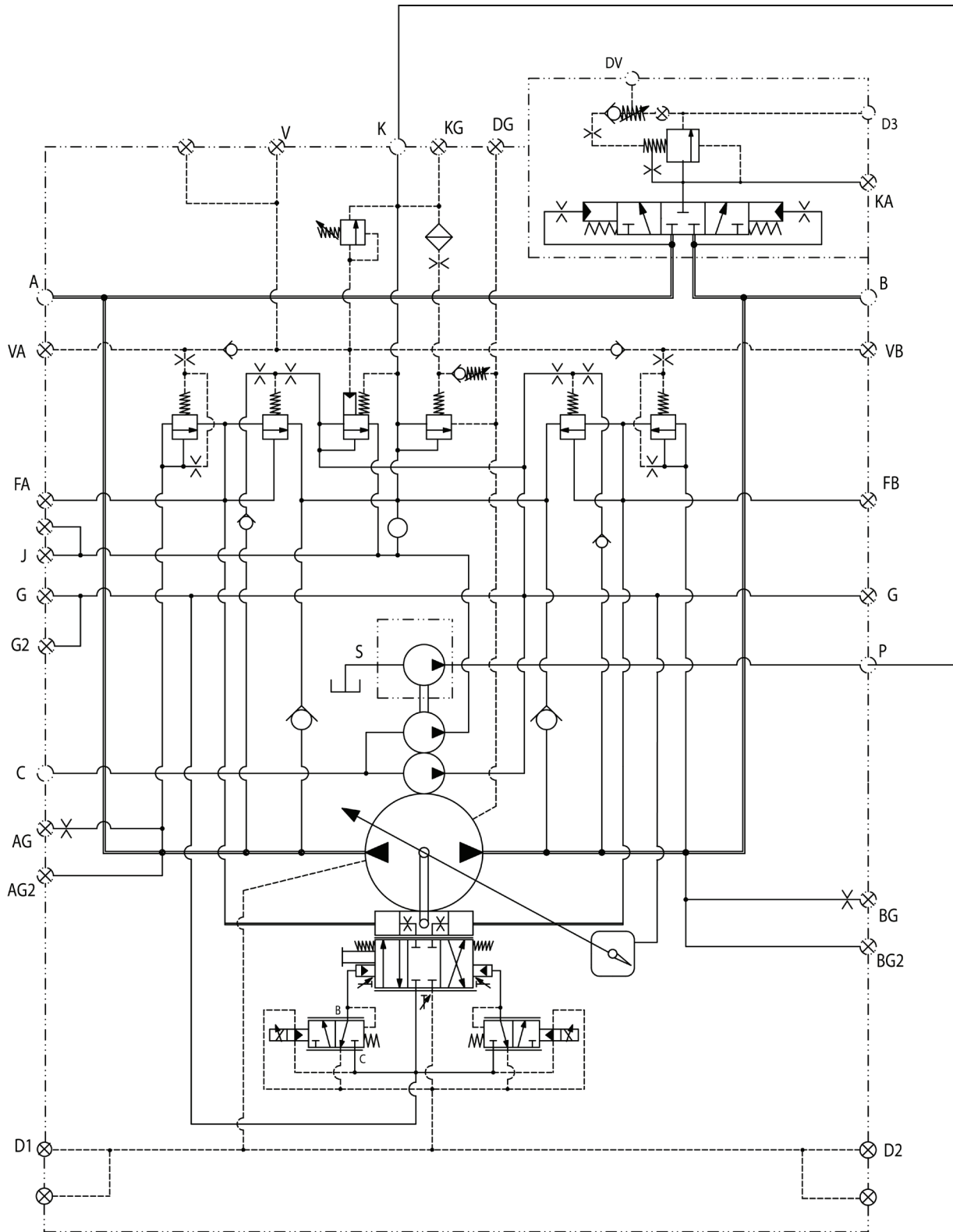
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG & AG3	SAE 6 STR. THD	System "A" Gauge Connection
BG & BG3	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 4 STR. THD	System "A" & "B" Gauge Connections
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 16 STR. THD	Case Drains
G	SAE 4 STR. THD	Servo Outlet to External Filter or Gauge Connection
K & K1	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
G2	SAE 8 STR. THD	Servo Pressure Gauge Connection



# P11/14R

# P11/14S

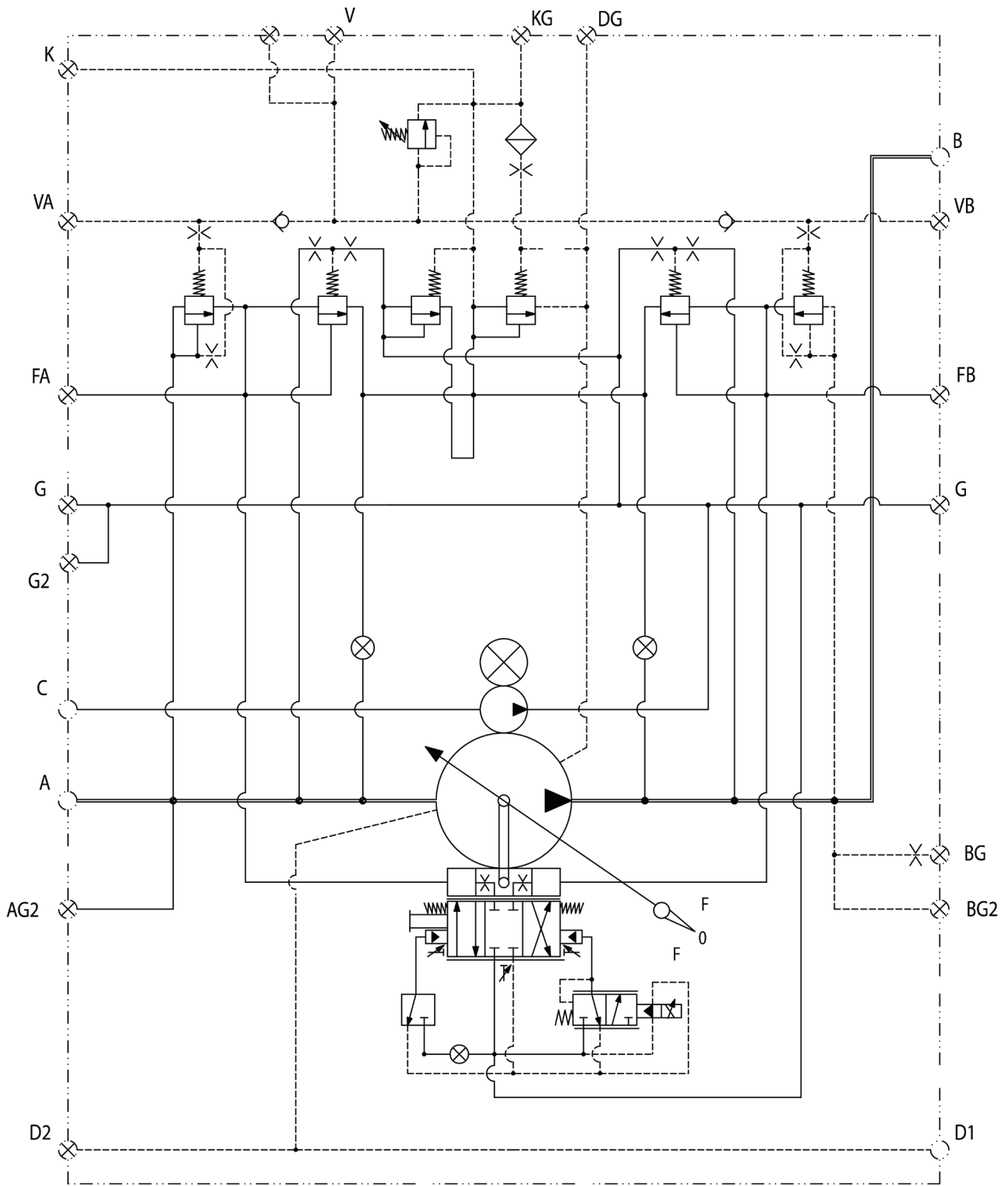
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 4 STR. THD	System "A" & "B" Gauge Connections
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 16 STR. THD	Case Drains
G	SAE 4 STR. THD	Servo Outlet to External Filter or Gauge Connection
K	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
KA	SAE 12 STR. THD	Shuttle Relief Inlet
D3	SAE 16 STR. THD	Shuttle Drain
DV	SAE 4 STR. THD	Shuttle External Pilot Valve Drain
J	SAE 8 STR. THD	Internal Auxiliary Pump Outlet To External Filter
G2	SAE 8 STR. THD	Servo Pressure Gauge Connection



# P11/14S

# P11/14V

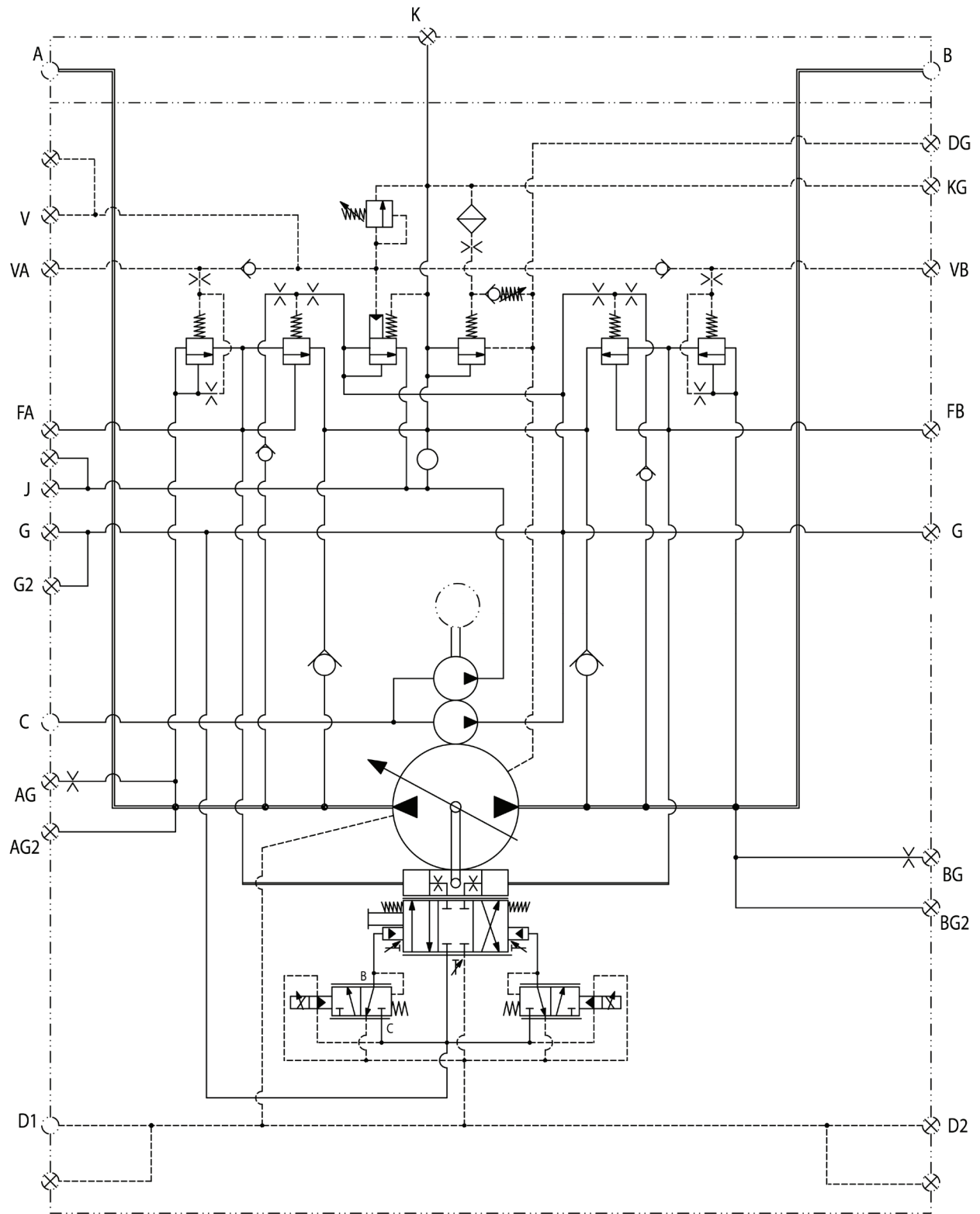
Ports	Port Sizing	Identification Key
A	SAE 2.5 Code 61	System Port
B	SAE 1.5 Code 62	System Port
BG	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 4 STR. THD	System "A" & "B" Gauge Connections
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 16 STR. THD	Case Drains
G	SAE 4 STR. THD	Servo Outlet to External Filter or Gauge Connection
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
G2	SAE 8 STR. THD	Servo Pressure Gauge Connection



# P11/14V

# P11/14X

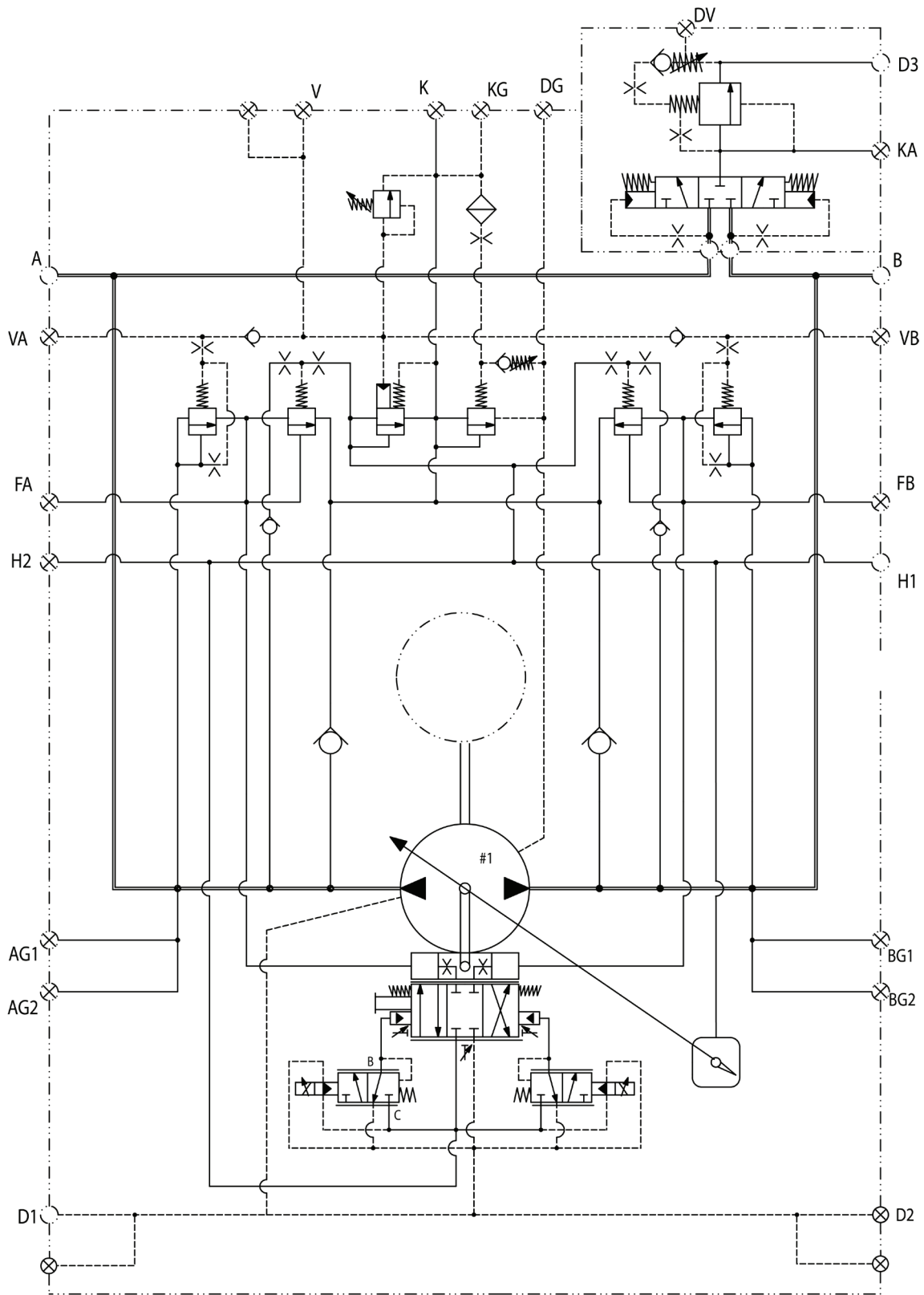
Ports	Port Sizing	Identification Key
A	SAE 1.5 Code 62	System Port
B	SAE 1.5 Code 62	System Port
AG	SAE 6 STR. THD	System "A" Gauge Connection
BG	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 4 STR. THD	System "A" & "B" Gauge Connections
C	SAE 20 STR. THD	Internal Auxiliary Pump Inlet
DG	SAE 6 STR. THD	Case Gauge Connection
D1 & D2	SAE 16 STR. THD	Case Drains
G	SAE 4 STR. THD	Servo Outlet to External Filter or Gauge Connection
K	SAE 12 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 6 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
J	SAE 8 STR. THD	Internal Auxiliary Pump Outlet To External Filter
G2	SAE 8 STR. THD	Servo Pressure Gauge Connection



# P11/14X

# P24/30L

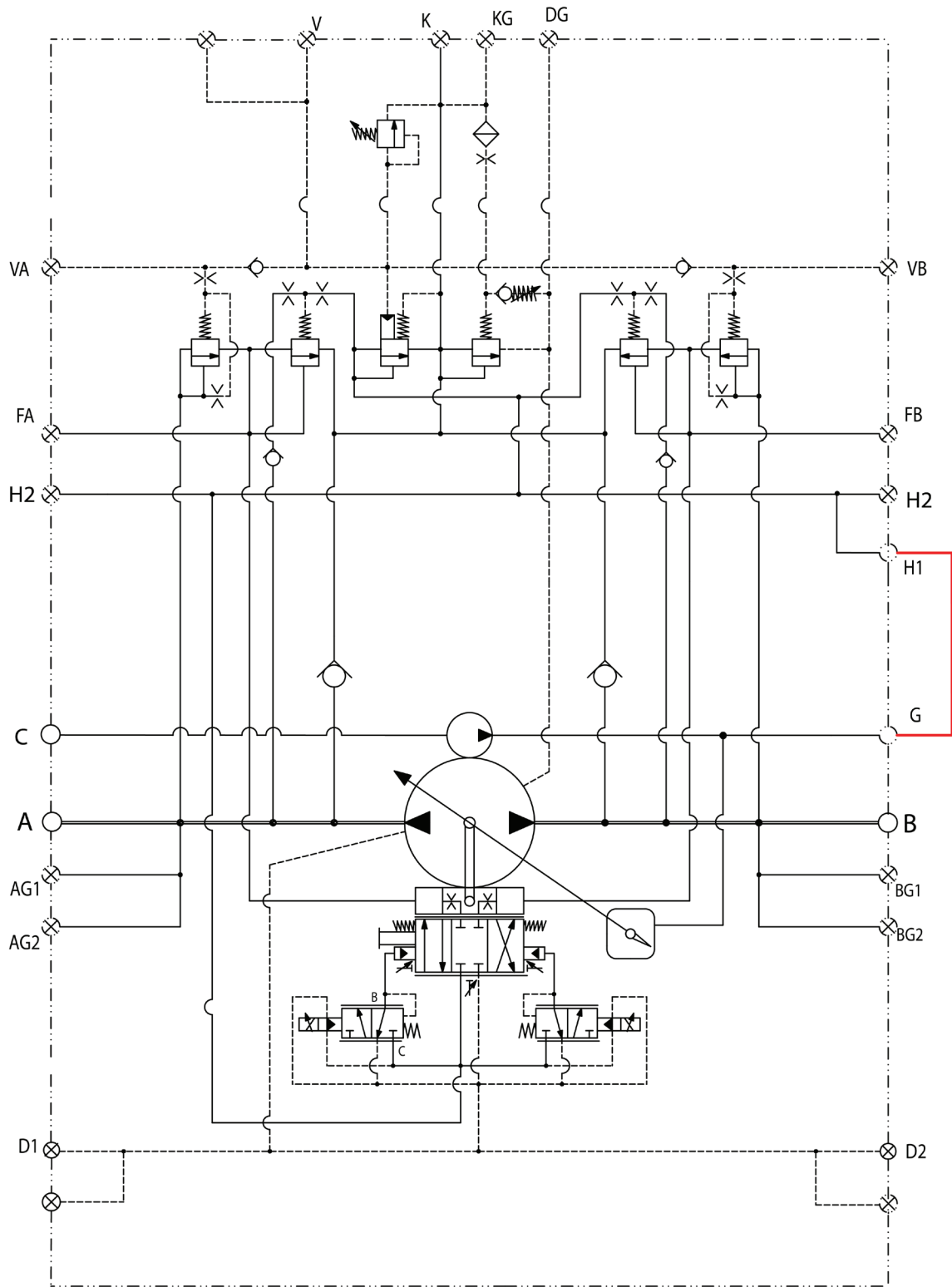
Ports	Port Sizing	Identification Key
A	SAE 2.0 Code 62	System Port
B	SAE 2.0 Code 62	System Port
AG1	SAE 6 STR. THD	System "A" Gauge Connection
BG1	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 8 STR. THD	System "A" & "B" Gauge Connections
DG & H2	SAE 6 STR. THD	"DG" Case Gauge Connection & "H2" Alternative Servo Inlet
D1 & D2	SAE 20 STR. THD	Case Drains
H1	SAE 12 STR. THD	"H1" Servo Pressure Inlet From External Filter
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 4 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
KA	SAE 12 STR. THD	Shuttle Relief Inlet
D3	SAE 16 STR. THD	Shuttle Drain
DV	SAE 4 STR. THD	Shuttle External Pilot Valve Drain



# P24/30L

# P24/30P

Ports	Port Sizing	Identification Key
A	SAE 2.0 Code 62	System Port
B	SAE 2.0 Code 62	System Port
AG1	SAE 6 STR. THD	System "A" Gauge Connection
BG1	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 8 STR. THD	System "A" & "B" Gauge Connections
C	SAE 2.0 Code 61	Internal Auxiliary Pump Inlet
DG & H2	SAE 6 STR. THD	"DG" Case Gauge Connection & "H2" Alternative Servo Inlet
D1 & D2	SAE 20 STR. THD	Case Drains
G	SAE 12 STR. THD	Servo Outlet To External Filter Or Gauge Connection
H1	SAE 12 STR. THD	"H1" Servo Pressure Inlet From External Filter
K	SAE 32 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 4 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side

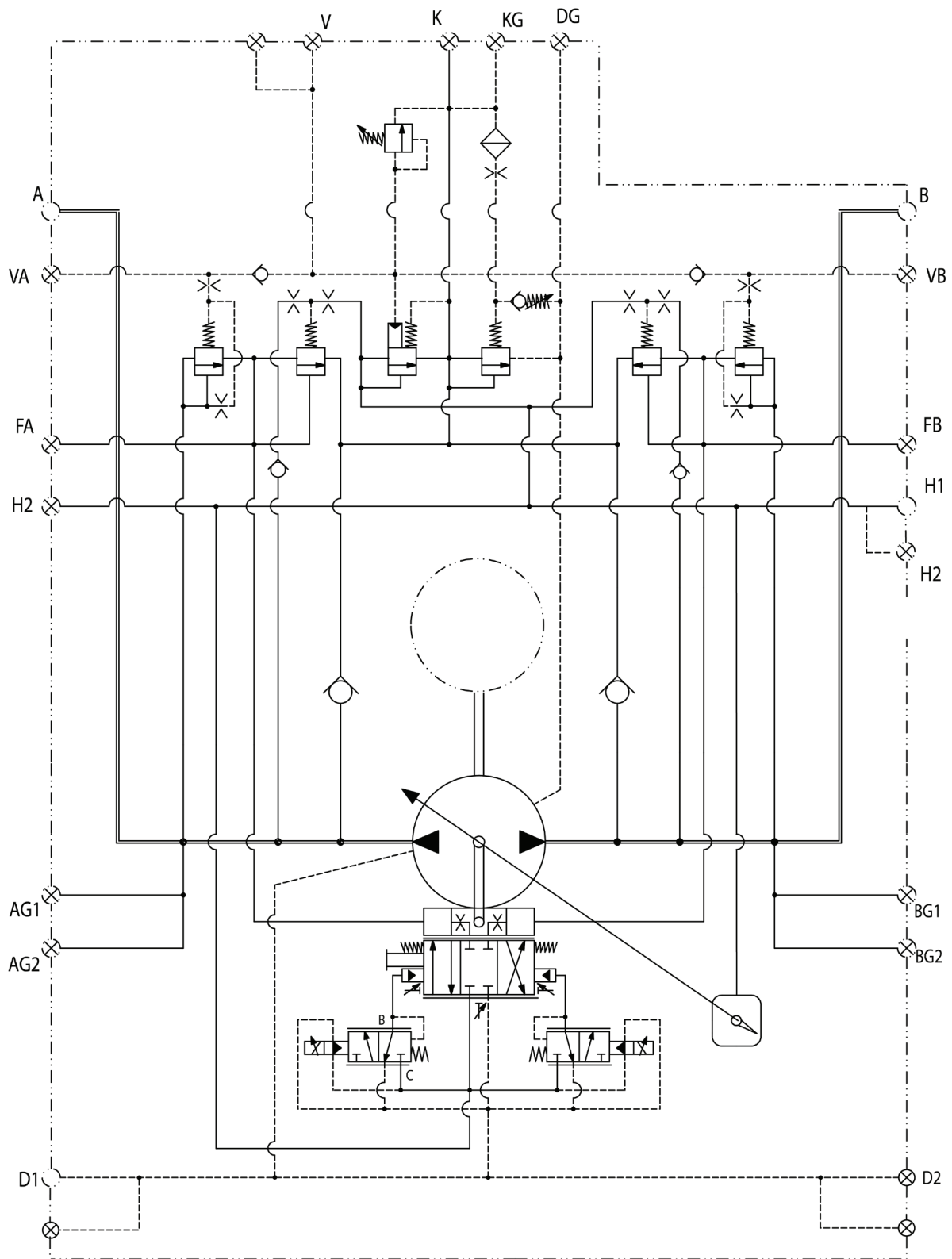


By Customer

# P24/30P

# P24/30R

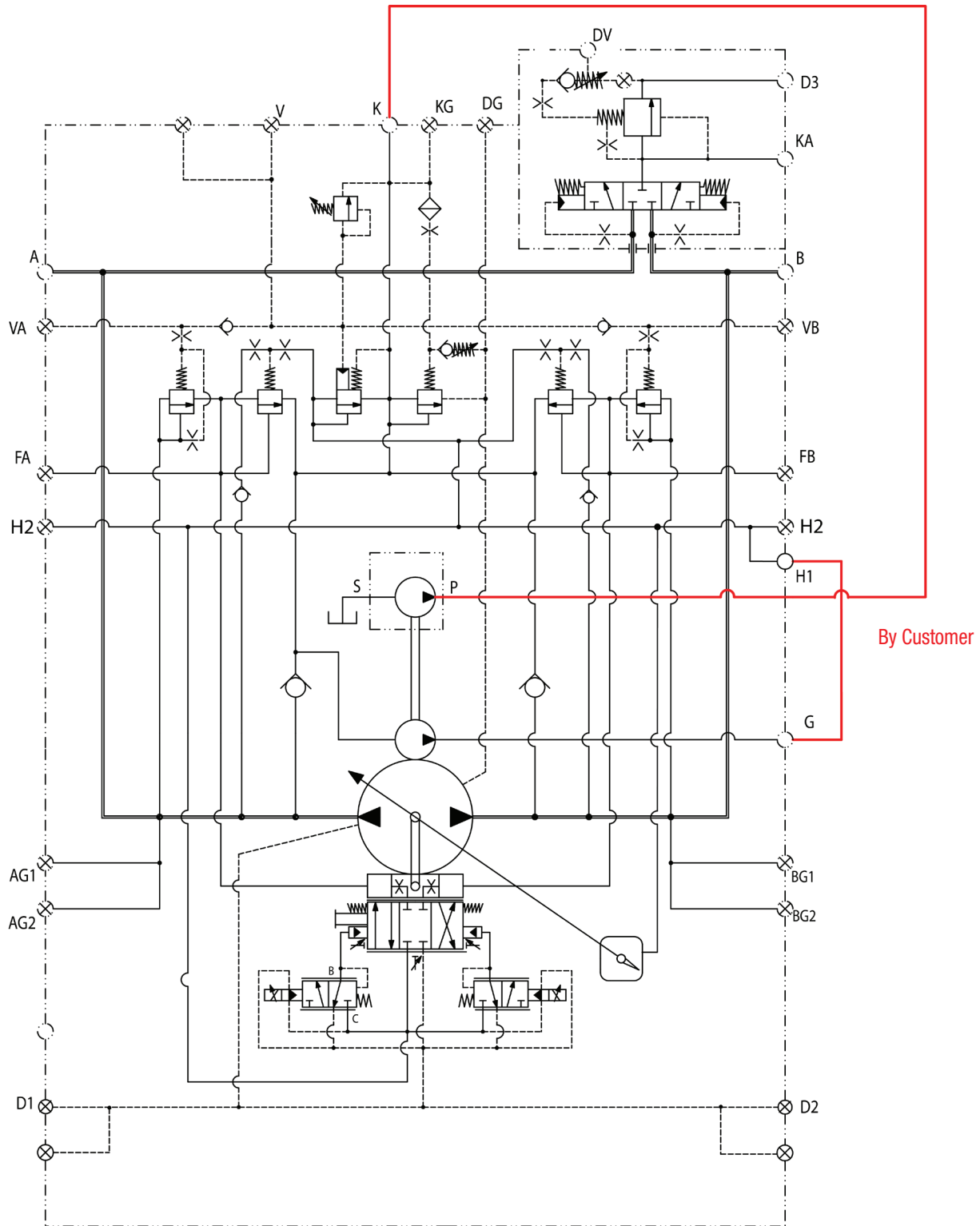
Ports	Port Sizing	Identification Key
A	SAE 2.0 Code 62	System Port
B	SAE 2.0 Code 62	System Port
AG1	SAE 6 STR. THD	System "A" Gauge Connection
BG1	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 8 STR. THD	System "A" & "B" Gauge Connections
DG & H2	SAE 6 STR. THD	"DG" Case Gauge Connection & "H2" Alternative Servo Inlet
D1 & D2	SAE 20 STR. THD	Case Drains
H1	SAE 12 STR. THD	"H1" Servo Pressure Inlet From External Filter
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 4 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side



# P24/30R

# P24/30S

Ports	Port Sizing	Identification Key
A	SAE 2.0 Code 62	System Port
B	SAE 2.0 Code 62	System Port
AG1	SAE 6 STR. THD	System "A" Gauge Connection
BG1	SAE 6 STR. THD	System "B" Gauge Connection
AG2 & BG2	SAE 8 STR. THD	System "A" & "B" Gauge Connections
DG & H2	SAE 6 STR. THD	"DG" Case Gauge Connection & "H2" Alternative Servo Inlet
D1 & D2	SAE 20 STR. THD	Case Drains
G	SAE 12 STR. THD	Servo Outlet To External Filter Or Gauge Connection
H1	SAE 12 STR. THD	"H1" Servo Pressure Inlet From External Filter
K	SAE 16 STR. THD	Auxiliary Replenish Inlet from External Filter
KG	SAE 6 STR. THD	Replenish Gauge Connection
FA & FB	SAE 4 STR. THD	Control Chamber Gauge Connection "A" & "B" Sides
V, VA & VB	SAE 4 STR. THD	"V" Compensator Vent "A" & "B" Sides
		"VA" Compensator Vent "A" Side
		"VB" Compensator Vent "B" Side
KA	SAE 12 STR. THD	Shuttle Relief Inlet
D3	SAE 16 STR. THD	Shuttle Drain
DV	SAE 4 STR. THD	Shuttle External Pilot Valve Drain



# P24/30S



Parker Hannifin Corporation  
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